



Louisville Metro Air Pollution Control District  
850 Barret Avenue  
Louisville, Kentucky 40204-1745



## Title V Operating Permit

Permit No.: 160-97-TV (R1)

Plant ID: 0062

Effective Date: 5/23/2013

Expiration Date: 5/31/2018

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

E.I Dupont De Nemours & Co., Inc.  
4200 Camp Ground Road  
Louisville, KY 40216

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.


Application No. 10554

Application Received: 3/2/2007

Permit Writer: Shannon Hosey

Administratively Complete: 5/1/2007

Public Notice Date: 3/2/2013

  
Air Pollution Control Officer  
April 23, 2013

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**Title V Permit Revisions/Changes**

<b>Revision No.</b>	<b>Issue Date</b>	<b>Public Notice Dates</b>	<b>Type</b>	<b>Page No.</b>	<b>Description</b>
N/A	08/30/2002	9/24/00, 12/10/00, 1/28/01	Initial	Entire Permit	Initial Permit Issuance
R1	04/23/2013	03/02/2013	Renewal	Entire Permit	Regular Renewal; Incorporate STAR requirements, Construction Permits 394-05-C, 344-08-C, 345-08-C, 81-09-C, 82-09-C and 133-09-C

### Abbreviations and Acronyms

AFS	- AIRS Facility Subsystem
AIRS	- Aerometric Information Retrieval System
atm	- Atmosphere
BACT	- Best Available Control Technology
Btu	- British Thermal Unit
CEMS	- Continuous Emission Monitoring System
CAAA	- Clean Air Act Amendments (15 November 1990)
HAP	- Hazardous Air Pollutant
hr	- hour
l	- Liter
lb	- Pound
LMAPCD	- Louisville Metro Air Pollution Control District
MACT	- Maximum Achievable Control Technology
m	- Meter
mg	- Milligram
mm	- Millimeter
MM	- Million
MOCS	- Management of Change System
NAICS	- North American Industry Classification System
NSR	- New Source Review
NO <sub>x</sub>	- Nitrogen oxides
NSPS	- New Source Performance Standards
PM	- Particulate Matter
PM <sub>10</sub>	- Particulate matter less than 10 microns
ppm	- Parts per million
PSD	- Prevention of Significant Deterioration
PMP	- Preventive Maintenance Plan
psia	- Pounds per square inch absolute
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO <sub>2</sub>	- Sulfur dioxide
TAC	- Toxic Air Contaminant
tpy	- Tons per year
VOC	- Volatile Organic Compound

### **Preamble**

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 2.02, Section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 2.02, Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

**General Conditions**

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

***US EPA - Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-8960***

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
  - ii. The permitted facility was at the time being properly operated.
  - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
  - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.6)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.



- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)
10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)
- If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
12. **Insignificant Activities** - The owner or operator shall:
- a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)
13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
- a. Enter the premises to inspect any emissions-related activity or records required in this permit.
- b. Have access to and copy records required by this permit.
- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)
14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of

emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. All semi-annual compliance reports shall include the following certification statement per Regulation 2.16.

- “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete”.
- Signature and title of company responsible official.

If a change in the “Responsible Official” (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 <sup>st</sup> through June 30 <sup>th</sup>	August 29 <sup>th</sup>
July 1 <sup>st</sup> through December 31 <sup>st</sup>	March 1 <sup>st</sup> <sup>1</sup>

<sup>1</sup>Note: The date for leap years is February 29.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16,

sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:
  - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
  - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
  - c. Knowingly making any false statement in any permit application.
  - d. Noncompliance with Regulation 1.07, section 4.2; or
  - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16, section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
35. **Submittal of Reports, Data, Notifications, and Applications**
- a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:
- Louisville Metro Air Pollution Control District  
850 Barret Ave  
Louisville, KY 40204-1745***
- b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:
- US EPA - Region IV  
APTMD - 12th floor  
Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303-3104***
36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emissions Standards and Maintenance Requirements
1.06	Source Self-Monitoring, Emissions Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning

Regulation	Title
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

**District Only Enforceable:**

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Fees (Emission Fee, Permit Fees and Permit Renewal Procedures)
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions
5.01	General Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;
- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air

conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

**Emission Unit U1:** Powerhouse - Two Natural Gas Boilers**U1 Applicable Regulations:**

<b>FEDERALLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	1, 2, 3, 4.3, 5.3 and 5.4
7.02	Federal New Source Performance Standards Adopted by Reference	1.1, 1.10. 1.21, 2, 4 and 5
7.06	Standards of Performance for New Indirect Heat Exchangers	1 through 5
40 CFR 60 Subpart A	General Provisions	60.1 through 60.19
40 CFR 60 Subpart Db	Standards of Performance for Industrial Commercial Institutional Steam Generating Units	60.40b (a) and (g), 60.41b, 60.42b (a), (e), (g) and (j), 60.43b (f) and (g), 60.44b (a)(1)(ii), (h) and (i), 60.45b (a) and (j), 60.46b (a through (d) and (e)(4), 60.47b (f), 60.48b (a) through (d), (e), (e)(2), (f), (g)(1), 60.49b (a), (b), (d), (f) through (i), (o) and (r)
40 CFR 63 Subpart DDDDD	Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters  <b>Note:</b> On February 7, 2012, USEPA issue a "No Action" policy regarding these rules and re-set the deadlines upon completing its reconsideration rulemaking currently underway. See Federal Register, Vol. 76, No. 247, pages 80598-80672, dated December 23, 2011. This regulation has not been finalized.	63.7485, 63.7495, 63.7499, 63.7500, 63.7515, 63.7530, 63.7540, 63.7545, 63.7550, 63.7555, 63.7560, 63.7565, 63.7570 and 63.7575

<b>DISTRICT ONLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	1 and 2
5.01	General Provisions	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

<b>U1 Equipment</b>				
<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulation</b>	<b>Control ID</b>	<b>Stack ID</b>
1000 and 1001	Two (2) 174 MMBtu/hr Babcock and Wilcox Boilers installed in 1994	7.06	N/A	S-1
		40 CFR 60 Subpart Db		
		6.42		
		40 CFR 63 Subpart DDDDD		

**U1 Control Devices:** There are no control devices associated with Emission Unit U1.



**U1 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****a. PM**

The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.10 pounds per million BTU actual total heat input. (Regulation 7.06, section 4.1.4) (See Comment 2)

**b. Opacity**

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility particulate matter emissions which exhibit greater than 20% opacity.

**c. SO<sub>2</sub>**

i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 0.80 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels. (Regulation 7.06, section 5.1.2)

ii. The owner or operator shall not allow or cause the *plant-wide* SO<sub>2</sub> emissions to equal or exceed 594.4 tons during any consecutive 12-month period. (Construction permit #657-94-C)

**d. NO<sub>x</sub>**

i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain nitrous oxides in excess of 0.2 pounds per million BTU actual total heat input for combustion of natural gas. (40 CFR 60.44b(a)(1)(ii))

ii. The owner or operator shall comply with the NO<sub>x</sub> RACT plan that was adopted by Board Order on November 8, 1999. (See NO<sub>x</sub> RACT Attachment) (Regulation 6.42, section 4.3) (See Comment 1)

iii. The owner or operator shall not allow or cause the *plant-wide* NO<sub>x</sub> emissions to equal or exceed 203.2 tons during any consecutive 12-month period. (Construction permit #657-94-C)

**e. HAP**

i. Unless altered by Federal decisions or by promulgation of revisions to 40 CFR 63 Subpart DDDDD subsequent to February 7, 2012, the standards of this section will become effective on 21 March 2014 or whenever the Federal Regulation is passed into law.

- ii. The owner or operator must conduct a one-time energy assessment performed by a qualified energy assessor. This assessment must meet the requirements outlined in 40 CFR 63, subpart DDDDD, Table 3, item 3. (40 CFR 63.7500(a)(1))
  - 1) Visual inspection;
  - 2) An evaluation of operating characteristics of the facility;
  - 3) Inventory of major energy-consuming systems;
  - 4) A review of available architectural and engineering plans;
  - 5) A review of the facility's energy management practices;
  - 6) A list of major energy conservation measures;
  - 7) A list of energy savings for the major energy conservation measures identified; and
  - 8) A comprehensive report detailing the ways to improve efficiency.
- iii. Work practice standard (for Gas 1 Boilers, i.e., those that have natural gas combustion only): Conduct a tune-up of the boiler annual or biennially as specified in 40 CFR 63.7540. See Specific Condition S2.e.ii (40 CFR 63, Subpart DDDDD, Table 3, item 2)

f. **TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

**S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **PM**

There are no monitoring and record keeping requirements for this equipment. (See Comment 2)

b. **Opacity**

There are no monitoring and record keeping requirements for this equipment. (See Comment 3)

c. **SO<sub>2</sub>**

- i. The owner or operator shall record and maintain records of the amount of fuel combusted during each day and calculate the annual capacity factor for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. (40 CFR 60.49b(d))

- ii. The owner or operator shall monthly record the amount of fuel combusted and calculate the 12 consecutive month SO<sub>2</sub> emissions in order to demonstrate compliance with the limit in Specific Condition S1.c.ii.

d. **NO<sub>x</sub>**

- i. The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring systems (CEMS) for measuring the NO<sub>x</sub> emissions discharged to the atmosphere and record the output of the system. (40 CFR 60.48b)
- ii. The owner or operator shall maintain records of the following information for each steam generating unit operating day: (40 CFR 60.49b(g))
  - 1) Calendar date.
  - 2) The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/million Btu heat input) measured or predicted.
  - 3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
  - 4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
  - 5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
  - 6) Identification of F factor used for calculations, method of determination, and type of fuel combusted.
  - 7) Identification of times when hourly averages have been obtained based on manual sampling methods.
  - 8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
  - 9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.
  - 10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- iii. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boilers or any periods during which a continuous monitoring system is inoperative. (40 CFR 60.7 (b))

e. **HAP**

- i. Unless altered by Federal decisions or by promulgation of revisions to 40 CFR 63 Subpart DDDDD subsequent to February 7, 2012, the standards of this section will become effective on 21 March 2014 or whenever the Federal Regulation is passed into law.
- ii. For affected sources subject to the work practice standard, you must conduct an annual or biennial performance tune-up according to §63.7540(a)(10) and (a)(11), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. (40 CFR 63.7515(e))
- iii. If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct a tune-up of the boiler annually to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi). (40 CFR 63.7540(a)(10))
  - 1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months). (40 CFR 63.7540 (a)(10)(i))
  - 2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540 (a)(10)(ii))
  - 3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (40 CFR 63.7540(a)(10)(iii))
  - 4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(iv))
  - 5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). (40 CFR 63.7540(a)(10)(v))
  - 6) Maintain onsite and submit, if requested by the Administrator, annual report containing the information in paragraphs (a)(10)(vi)(A) through (a)(10)(vi)(C) of this section.

(40 CFR 63.7540(a)(10)(vi))

- i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.  
(40 CFR 63.7540(a)(10)(vi)(A))
- ii. A description of any corrective actions taken as a part of the tune-up of the boiler. (40 CFR 63.7540(a)(10)(vi)(B))
- iii. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler if the unit was physically and legally capable of using more than one type of fuel. (Units sharing a fuel meter may estimate the fuel use by each unit. (40 CFR 63.7540(a)(10)(vi)(C))

f. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.

S3. **Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. **PM**

There are no reporting requirements for this equipment. (See Comment 2)

b. **Opacity**

There are no reporting requirements for this equipment. (See Comment 3)

c. **SO<sub>2</sub>**

- i. Emission Unit ID number, Stack ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of all periods of exceedance of the emission limit in Specific Conditions S1.c.ii.;
- iv. Description of any corrective action taken for each exceedance.

d. **NO<sub>x</sub>**

- i. Emission Unit ID number, Stack ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of all periods of exceedance of the emission limit in Specific Condition S1.d.i.;
- iv. Information recorded under 40 CFR 60.49b(g); and
- v. Description of any corrective action taken for each exceedance.
- vi. The owner or operator is required to submit excess emission reports for any excess emissions that occurred during the reporting period. (40 CFR 60.49b(h)(2))

e. **HAP**

- i. For boilers that are subject only to a requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively, and not subject to emission limits or operating limits, you may submit only an annual or biennial compliance report as specified in paragraphs (b)(1) through (5), instead of a semi-annual compliance report. (40 CFR 63.7550(b))
- ii. The compliance report must contain the information required below:(40 CFR 63.7550(c))
  - 1) Company name and address. (40 CFR 63.7550(c)(1))
  - 2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the report. (40 CFR 63.7550(c)(2))
  - 3) Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(3))
  - 4) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled unit shutdown. (40 CFR 63.7550(c)(12))

f. **TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a Negative Declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or

meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze.  
(Regulation 5.21 sections 4.22 – 4.24)

- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.f.ii.

### U1 Comments

1. The replacement of 3 large existing coal boiler to the current 2 gas/oil boilers, along with the Board Order dated of November 8, 1999 constitute the NO<sub>x</sub> RACT plan, per Regulation 6.42, section 4.3 for this source. (See NO<sub>x</sub> RACT Attachment)
2. The District has performed a one-time PM and SO<sub>2</sub> compliance demonstration using AP-42 emission factors. The emission standards cannot be exceeded when combusting natural gas. Therefore, there are no additional monitoring, recordkeeping, or reporting requirements with respect to PM and SO<sub>2</sub> for natural gas.
3. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.
4. The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.21, section 2.7)
5. Emission point 1002 was removed because it was only regulated under 40 CFR 82, Protection of Stratospheric Ozone.
6. Based on Tier 4 ISC3 refined air modeling, the carcinogenic risk for each Category 1 and Category 2 TAC are below 1.0 for non-industrial property and below 10.0 for industrial property with the fuel oil usage limits and utilizing the vapor recovery system on the chloroform storage tanks for each process. The carcinogenic risk for all Category 1 and Category 2 TACs for all processes are below 7.5 for non-industrial property and below 75.0 for industrial property. Since the maximum off-site R<sub>NC</sub> for all process/process equipment is less than 1.0 and the maximum off-site R<sub>C</sub> is less than 7.5 for the plant-wide cumulative risk, the source has demonstrate compliance with the EA Goals for each TAC.

<b>TAC</b>	<b>Risk from all processes on non-industrial property</b>	<b>Risk from all processes on industrial property</b>
Chloroform	0.43	5.81
Formaldehyde	0.02	0.04
Arsenic	0.21	0.48
Cadmium	0.03	0.06

<b>TAC</b>	<b>Risk from all processes on non-industrial property</b>	<b>Risk from all processes on industrial property</b>
Chromium <sup>+6</sup>	0.11	0.25
Nickel	0.86	1.87
Hydrofluoric Acid	0.18	0.18
Chlorine	0.325	0.325
Cobalt/Cobalt Compounds	0.066	0.066
Manganese/Manganese Compounds	0.0092	0.0092
Naphthalene	0.000057	0.000057
Total	2.24	9.09



**Emission Unit U3: Freon<sup>®</sup> 22/Freon<sup>®</sup> 23 Process****U3 Applicable Regulations**

<b>FEDERALLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
1.18	Rule Effectiveness	1, 2 and 3
5.15	Chemical Accident Prevention Provisions	1
6.13	Standards of Performance for Existing Storage Vessels for Volatile Organic Substances	1, 2, 3.1 and 4
6.24	Standards of Performance for Existing Sources Using Organic Materials	1, 2, 3.2, 4.1 and 5.2
40 CFR Subpart A	General Provisions	§63.1 – 16
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	§63.100 – 106
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater	§63.110 – 123, 126 – 149, 151 and 152
40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	§63.160 – 163, 168, 175, 176, 180 - 182
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A - H
40 CFR 82	Protection of Stratospheric Ozone	N/A

<b>DISTRICT ONLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	1 and 2
5.01	General Provisions	1 and 2
5.14	Hazardous Air Pollutants and Source Categories	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U3 Equipment				
Emission Point	Description	Applicable Regulation	Control ID	Stack ID
3000	Two (2) Chloroform Storage Tanks TS-3 and TS-18. Greater than 74,600 gallons each, installed in 1954	5.21	CD-300	S-3
		6.13		
		40 CFR 63 Subpart F, G, H		
3001	Vaporizers V-1 and V-2	5.21	CD-301	S-4
3002	Reactors and Refining Equipment for Manufacturing Freon <sup>®</sup> 22 and Freon <sup>®</sup> 23; Tank TR-8 and Tank TW-1	5.21	CD-302 and CD-303	S-5
		6.24		
		40 CFR 63 Subpart F, G, H		
3009	Fugitive Emissions	40 CFR 63 Subpart F and H	N/A	N/A

U3 Control Devices			
ID	Description	Performance Indicator	Stack ID
CD-300	Condenser	Temperature	S-3
CD-301	Wet Scrubber	Caustic concentration is analyzed weekly. Caustic is changed out when the % NaOH drops below 8%	S-4
CD-302	East Wet Scrubber	Acid Strength	S-5
CD-303	West Wet Scrubber	Acid Strength	S-5

**U3 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****a. VOC**

- i. The owner or operator shall use a vapor recovery system on Emission Point 3000. (Regulation 6.13, section 3.1)
- ii. The owner or operator shall limit VOC emissions to 3000 lb/day and 450 lb/hr from Emission Point 3002. (Regulation 6.24, section 3.3)(See Comment 2)

**b. HAP (non LDAR) (40 CFR 63 Subpart F, 40 CFR 63 Subpart G)**

- i. The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair. (40 CFR 63.105(b)) The owner or operator shall modify and update the information required as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. (40 CFR 63.105(c)) The description shall:
  - 1) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. (40 CFR 63.105(b)(1))
  - 2) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere. (40 CFR 63.105(b)(2))
  - 3) Specify the procedures to be followed when clearing materials from process equipment. (40 CFR 63.105(b)(3))
- ii. The owner or operator shall operate a closed vent system and a control device on the two storage tanks in emission point 3000. The control device shall comply with the following: (40 CFR 63.119(a)(2))
  - 1) The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 90 percent or greater. (40 CFR 63.119(e)(2))
  - 2) Periods of planned or routine maintenance of the control device, during which the control device does not meet the specifications, shall not exceed 240 hours per year. (40 CFR 63.119(e)(3))

c. **HAP (LDAR) (40 CFR 63 Subpart H)**

- i. For pumps in light liquid service, the instrument reading, as determined by the method as specified in §63.180(b) of this subpart, that defines a leak of the standard is 1000 parts per million or greater. (40 CFR 63.163(b)(2)(iii)(C)) For pumps to which a 1000 parts per million leak definition applies, repair is not required unless an instrument reading of 2000 parts per million or greater is detected. (40 CFR 63.163(c)(3))
- ii. For connectors in light liquid service, if an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. (63.174(a)(2))
- iii. For valves in light liquid service, if an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. (63.168(b)(2)(iii))

d. **TAC**

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)
- ii. The owner or operator shall utilize the vapor recovery system at all times the chloroform storage tanks are in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 5.21, section 4.7)

e. **District Regulation 5.15 Regulated Substance (40 CFR 68 Subpart G)**

The owner or operator shall comply with the Risk Management Plan submitted on September 30, 2010 or the most recent submittal.

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. For control device CD-300 (Condenser), the owner or operator shall monitor and record the temperature daily to ensure that the temperature range shows the control efficiency is at 85% or greater.
- ii. For control device CD-301 (Wet Scrubber), the owner or operator shall monitor and record the concentration of NaOH weekly to insure that it does not drop below 8%.

- iii. For control devices CD-302 and CD-303 (Wet Scrubbers), the owner or operator for each wet scrubber shall monitor and record the acid concentration in the water to ensure that it is less than 5% acid.

**b. HAP (non LDAR) (40 CFR 63 Subpart F, 40 CFR 63 Subpart G)**

- i. The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph 1), or submit the results of a performance test as described in paragraph 2). (40 CFR 63.120(d)(1))
  - 1) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs a) through c), as applicable.
    - a) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.
    - b) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.
    - c) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.
- ii. The owner or operator shall keep a record of the dimensions and capacity of each storage vessel in emission point 3000 (40 CFR 63.123(a))
- iii. An owner or operator who elects to comply with §63.119(e) of this subpart shall keep in a readily accessible location the records specified in the following paragraphs. (40 CFR 63.123(f))
  - 1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5).
  - 2) A record of the planned routine maintenance performed on the control device including the duration of each time the control

device does not meet the specification of §63.119(e)(1) or (e)(2), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in the following paragraphs.

- a) The first time of day and date the requirements of §63.119(e)(1) or (e)(2), as applicable, were not met at the beginning of the planned routine maintenance, and
    - b) The first time of day and date the requirements of §63.119(e)(1) or (e)(2), as applicable, were met at the conclusion of the planned routine maintenance.
  - iv. The owner or operator shall keep records of the occurrence and duration of each start up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment or continuous monitoring systems used to comply with subparts F, G, or H during which excess emissions occur. (40 CFR 63.103(c)(2)(i))
  - v. The owner or operator shall keep records; for each start up, shut down or malfunction during which excess emissions occur; to demonstrate that the procedures specified in the source's start up, shut down, and malfunction plan were followed and documentation of actions taken that are not consistent with the plan. (40 CFR 63.103(c)(2)(ii))
  - vi. The owner or operator shall keep records, for each heat exchange system, indicating a leak and when the leak was detected, and if demonstrated to not be a leak, the basis of that determination; any leaks detected by procedures subject to paragraph 63.104(c)(2) and the date the leak was discovered; the dates of efforts to repair the leak; and the method or procedure used to confirm repair of a leak and the date the repair was confirmed. (40 CFR 63.104(f)(1))
  - vii. The owner or operator shall maintain a record of the information required in Specific Condition S1.b.i.
- c. **HAP (LDAR) (40 CFR 63 Subpart H)**
- i. The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) of this subpart and shall comply with the requirements of paragraphs (a) through (d) of this section, except as provided in §63.162(b) of this subpart and paragraphs (e) through (j) of this section. (40 CFR 63.163(b)(1))
  - ii. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. (40 CFR 63.163(b)(3))

- 1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171 of this subpart. (40 CFR 63.163(c)(1))
- 2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable. (40 CFR 63.163(c)(2))
  - a) Tightening of packing gland nuts. (40 CFR 63.163(c)(2)(i))
  - b) Ensuring that the seal flush is operating at design pressure and temperature. (40 CFR 63.163(c)(2)(ii))
- iii. The owner or operator of a source subject shall monitor all valves, except as provided in §63.162(b) and (h) and (i), at the intervals specified in (c) and (d) and shall comply with all other provisions of this section, except as provided in §63.171, §63.177, §63.178, and §63.179. (40 CFR 63.168(b))
  - 1) The valves shall be monitored to detect leaks by the method specified in §63.180(b). (40 CFR 63.168(b)(1))
  - 2) The owner or operator shall monitor valves for leaks at the intervals specified in §63.168(d). (40 CFR 63.168(d))
- iv. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171. (40 CFR 63.168(f)(1))
  - 1) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. (40 CFR 63.168(f)(2))
  - 2) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. (40 CFR 63.168(f)(3))
- v. First attempts at repair include, but are not limited to, the practices listed in §63.168(g) where practicable. (40 CFR 63.168(g))
- vi. The owner or operator of a process unit subject to this subpart shall monitor all connectors in gas/vapor and light liquid service, except as provided in §63.162(b), and in §63.174(f) through §63.174(h), at the intervals specified in §63.174(b). 40 CFR 63.174(a))
- vii. The connectors shall be monitored to detect leaks by the method specified in §63.180(b). (40 CFR 63.174(a)(1))
- viii. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §63.174(g) and in §63.171. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. (40 CFR 63.174(d))

- ix. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in §63.174 of this subpart and instrumentation systems) subject to the requirements of 40 CFR 63 Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174(b)(1) or (b)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(1)(i))
- x. A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) of 40 CFR 63 Subpart H and valves subject to the provisions of §63.168(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(1)(ii))
- xi. Equipment subject to the provisions of 40 CFR 63 Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. (40 CFR 63.181(b)(1)(iii))
- xii. A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) of 40 CFR 63 Subpart H. (40 CFR 63.181(b)(2)(i))
- xiii. Identification of screwed connectors subject to the requirements of §63.174(c)(2) of 40 CFR 63 Subpart H. Identification can be by area or grouping as long as the total number within each group or area is recorded. (40 CFR 63.181(b)(5))
- xiv. The following information pertaining to all pumps subject to the provisions of §63.163(j) and valves subject to the provisions of §63.168(h) and (i) of 40 CFR 63 Subpart H shall be recorded: (40 CFR 63.181(b)(7))
  - 1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment. (40 CFR 63.181(b)(7)(i))
  - 2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. (40 CFR 63.181(b)(7)(ii))
- xv. A list of valves removed from and added to the process unit, as described in §63.168(e)(1) of 40 CFR 63 Subpart H, if the net credits for removed valves is expected to be used. (40 CFR 63.181(b)(8)(i))
- xvi. For visual inspections of equipment subject to the provisions of 40 CFR 63 Subpart H [e.g., §63.163(b)(3), §63.163(e)(4)(i)], the owner or operator shall document that the inspection was conducted and the date of the



inspection. The owner or operator shall maintain records as specified in paragraph (d) of this section for leaking equipment identified in this inspection, except as provided in paragraph (e) of this section. These records shall be retained for 5 years. (40 CFR 63.181(c))

- xvii. When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of 40 CFR 63 Subpart H, the following information shall be recorded and kept for 5 years: (40 CFR 63.181(d))
- 1) The instrument and the equipment identification number and the operator name, initials, or identification number. (40 CFR 63.181(d)(1))
  - 2) The date the leak was detected and the date of first attempt to repair the leak. (40 CFR 63.181(d)(2))
  - 3) The date of successful repair of the leak. (40 CFR 63.181(d)(3))
  - 4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable. (40 CFR 63.181(d)(4))
  - 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. (40 CFR 63.181(d)(5))
    - a) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup /shutdown / malfunction plan, required by §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. (40 CFR 63.181(d)(5)(i))
    - b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. (40 CFR 63.181(d)(5)(ii))
  - 6) Dates of process unit shutdowns that occur while the equipment is unrepaired. (40 CFR 63.181(d)(6))
  - 7) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of 40 CFR 63 Subpart H, as described in §63.174(c)(1) of 40 CFR 63 Subpart H, unless the owner or operator elects to comply with the

provisions of §63.174(c)(1)(ii) of 40 CFR 63 Subpart H. (40 CFR 63.181(d)(7)(i))

- 8) The date and results of monitoring as required in §63.174© of 40 CFR 63 Subpart H. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of this section, then all connectors within the designated location shall be monitored. (40 CFR 63.181(d)(7)(ii))
  - 9) Copies of the periodic reports as specified in §63.182(d) of 40 CFR 63 Subpart H, if records are not maintained on a computerized database capable of generating summary reports from the records. (40 CFR 63.181(d)(9))
- xviii. Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of 40 CFR 63 Subpart H shall maintain the records specified in paragraphs (h)(1) through (h)(9) of this section for the period of the quality improvement program for the process unit. (40 CFR 63.181(h))
- 1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(1))
    - a) All data required in §63.175(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(i))
    - b) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter. (40 CFR 63.181(h)(1)(ii))
    - c) The beginning and ending dates while meeting the requirements of §63.175(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(1)(iii))
  - 2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e) of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(2))
    - a) All data required in §63.175(e)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(i))
    - b) The percent leaking valves observed each quarter. (40 CFR 63.181(h)(2)(ii))
    - c) Documentation of all inspections conducted under the requirements of §63.175(e)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(2)(iii))

- d) The beginning and ending dates while meeting the requirements of §63.175(e) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(2)(iv))
- 3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176 of 40 CFR 63 Subpart H: (40 CFR 63.181(h)(3))
  - a) All data required in §63.176(d)(2) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(i))
  - b) The rolling average percent leaking pumps. (40 CFR 63.181(h)(3)(ii))
  - c) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. (40 CFR 63.181(h)(3)(iii))
  - d) The beginning and ending dates while meeting the requirements of §63.176(d) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(3)(iv))
- 4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair. (40 CFR 63.181(h)(4))
- 5) Records of all analyses required in §§63.175(e) and 63.176(d) of 40 CFR 63 Subpart H. The records will include the following: (40 CFR 63.181(h)(5))
  - a) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices. (40 CFR 63.181(h)(5)(i))
  - b) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials. (40 CFR 63.181(h)(5)(ii))
  - c) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under §§63.175(e)(6)(iii) and 63.176(d)(6)(iii) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(5)(iii))

- d) The beginning date and duration of performance trials of each candidate superior emission performing technology. (40 CFR 63.181(h)(5)(iv))
- 6) All records documenting the quality assurance program for valves or pumps as specified in §§63.175(e)(7) and 63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(6))
- 7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(7))
- 8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of 40 CFR 63 Subpart H. (40 CFR 63.181(h)(8))
- 9) Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services. (40 CFR 63.181(h)(9))
- xix. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63 Subpart H under §63.160 of 40 CFR 63 Subpart H. (40 CFR 63.181(j))

**d. TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall maintain daily records that identify all periods of bypassing the vapor recovery system while the chloroform tanks are in operation or a declaration entered into the records that the vapor recovery system operated at all times the tanks were in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, the total lb/hr emissions of each TAC during each bypass event, summary information on the cause or reason for each control device bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the vapor recovery system.

**S3. Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

**a. VOC**

- i. Emission Unit ID number, Stack ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of all periods of exceedance of the monitored parameters; and
- iv. Description of any corrective action taken for each exceedance.

**b. HAP (non LDAR) (40 CFR 63 Subpart F, 40 CFR 63 Subpart G)**

- i. As required by §63.120(d)(4) and §63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of 40 CFR 63 for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119(e)(1) or (e)(2) of this subpart, as applicable. (40 CFR 63.122(g)(1))
  - 1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. (40 CFR 63.122(g)(1)(i))
  - 2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119(e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance. (40 CFR 63.122(g)(1)(ii))
- ii. If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section. (40 CFR 63.122(g)(2))
  - 1) Identification of the control device for which the measured parameters were outside of the established ranges. (40 CFR 63.122(g)(2)(i))
  - 2) Cause for the measured parameters to be outside of the established ranges. (40 CFR 63.122(g)(2)(ii))

c. **HAP (LDAR) (40 CFR 63 Subpart H)**

- i. The number of valves for which leaks were detected as described in §63.168(b) of this subpart, the percent leakers, and the total number of valves monitored. (40 CFR 63.182(d)(2)(i))
- ii. The number of valves for which leaks were not repaired as required in §63.168(f) of this subpart, identifying the number of those that are determined nonrepairable. (40 CFR 63.182(d)(2)(ii))
- iii. The number of pumps for which leaks were detected as described in §63.163(b) of this subpart, the percent leakers, and the total number of pumps monitored. (40 CFR 63.182(d)(2)(iii))
- iv. The number of pumps for which leaks were not repaired as required in §63.163(c) of this subpart. (40 CFR 63.182(d)(2)(iv))
- v. The number of connectors for which leaks were detected as described in §63.174(a) of this subpart, the percent of connectors leaking, and the total number of connectors monitored. (40 CFR 63.182(d)(2)(ix))
- vi. The number of connectors for which leaks were not repaired as required in §63.174(d) of this subpart, identifying the number of those that are determined nonrepairable. (40 CFR 63.182(d)(2)(xi))
- vii. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. (40 CFR 63.182(d)(2)(xiii))
- viii. The results of all monitoring to show compliance with §§63.164(i), 63.165(a), and 63.172(f) of this subpart conducted within the semiannual reporting period. (40 CFR 63.182(d)(2)(xiv))
- ix. If applicable, the initiation of a monthly monitoring program under §63.168(d)(1)(i) of this subpart, or a quality improvement program under either §§63.175 or 63.176 of this subpart. (40 CFR 63.182(d)(2)(xv))
- x. If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of this subpart. (40 CFR 63.182(d)(2)(xvi))

d. **TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a Negative Declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.

- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze.  
(Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.d.ii.
- iv. Identification of all periods of bypassing the vapor recovery system while the chloroform tanks were in operation during a reporting period. The report shall include the date, duration (including start and stop time) of each bypass event, the total lb/hr emissions of each TAC during each bypass event, summary information on the cause or reason for each bypass event, corrective action taken to minimize the extent and duration of each bypass event, and measures implemented to prevent reoccurrence of the situation that resulted in bypassing the vapor recovery system. If there are no periods of bypassing the vapor recovery system during a reporting period, the owner or operator shall submit a negative declaration for the reporting period.

### U3 Comments

1. Regulation 6.39 does not apply to affected facilities that are also subject to 40 CFR Part 63 Subpart H where such standards are applicable to the affected facility either directly or through incorporation by reference into another standard promulgated under 40 CFR Part 63.
2. A one-time compliance demonstration was performed on March 2, 2007, and the standard cannot be exceeded uncontrolled.
3. Based on Tier 4 ISC3 refined air modeling, the carcinogenic risk for each Category 1 and Category 2 TAC are below 1.0 for non-industrial property and below 10.0 for industrial property with the fuel oil usage limits and utilizing the vapor recovery system on the chloroform storage tanks for each process. The carcinogenic risk for all Category 1 and Category 2 TACs for all processes are below 7.5 for non-industrial property and below 75.0 for industrial property. Since the maximum off-site  $R_{NC}$  for all process/process equipment is less than 1.0 and the maximum off-site  $R_C$  is less than 7.5 for the plant-wide cumulative risk, the source has demonstrate compliance with the EA Goals for each TAC.

TAC	Risk from all processes on non-industrial property	Risk from all processes on industrial property
Chloroform	0.43	5.81
Formaldehyde	0.02	0.04
Arsenic	0.21	0.48
Cadmium	0.03	0.06

<b>TAC</b>	<b>Risk from all processes on non-industrial property</b>	<b>Risk from all processes on industrial property</b>
Chromium <sup>+6</sup>	0.11	0.25
Nickel	0.86	1.87
Hydrofluoric Acid	0.18	0.18
Chlorine	0.325	0.325
Cobalt/Cobalt Compounds	0.066	0.066
Manganese/Manganese Compounds	0.0092	0.0092
Naphthalene	0.000057	0.000057
Total	2.24	9.09



**Emission Unit U4: HCL**

Anhydrous hydrogen chloride gas from the Freon<sup>®</sup> 22/Freon<sup>®</sup> 23 process is absorbed in water to produce hydrochloric acid.

**U4 Applicable Regulations**

<b>FEDERALLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.15	Chemical Accident Prevention Provisions	1
40 CFR 63 Subpart NNNNN	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production	§63.8980, 8985, 8990, 9000, 9035, 9040 and 9050
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A - H

<b>DISTRICT ONLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	1 and 2
5.01	General Provisions	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

<b>U4 Equipment</b>				
<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulation</b>	<b>Control ID</b>	<b>Stack ID</b>
4000	HCL Stripping, Storage and Loading	5.21	CD-400	S-12
		40 CFR 63 Subpart NNNNN		
4001	Fugitive Emissions, HCL	5.21	N/A	N/A
		40 CFR 63 Subpart NNNNN		

<b>U4 Control Devices:</b>			
<b>ID</b>	<b>Description</b>	<b>Performance Indicator</b>	<b>Stack ID</b>
CD-400	Scrubber	Temperature	S-12

**U4 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****a. HAP (40 CFR 63 Subpart NNNNN)**

- i. The owner or operator must comply with the following emission limits and work practice standards for each emission stream that is part of an affected source for each: (40 CFR 63 9000(a))
  - 1) Emission stream from an HCl process vent:
    - a) Reduce HCl emissions by 99% or achieve an outlet concentration of 20 ppm by volume or less; and
    - b) Reduce Cl<sub>2</sub> emissions by 99% or greater or achieve an outlet concentration of 100 ppm by volume or less.
  - 2) Emission stream from an HCl storage tank, reduce HCl emissions by 99% or greater or achieve an outlet concentration of 120 ppm by volume or less.
  - 3) Emission stream from an HCl transfer operation, reduce HCl emissions by 99% or greater or achieve an outlet concentration of 120 ppm by volume or less.
  - 4) Emission stream from leaking equipment in HCl service,
    - a) Prepare and operate at all times according to an equipment LDAR plan that describes in detail the measures that will be put in place to detect leaks and repair them in a timely fashion; and
    - b) Submit the plan to the District for comment only with your Notification of Compliance Status; and
    - c) You may incorporate by reference in such plan existing manuals that describe the measures in place to control leaking equipment emissions required as part of other federally enforceable requirements, provided that all manuals that are incorporated by reference are submitted to the District.
- ii. The owner or operator must comply with the following operating limits for each emission stream that is part of an affected source that is vented to a control device: (40 CFR 63.9000(b))
  - 1) For each caustic scrubber or water scrubber/absorber, you must maintain the daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate, above the operating limit; and

2) Maintain the daily average scrubber temperature within the operating limits. (See Comment 1)

iii. The emission limits for HCl storage tanks in S1.a.i.2) do not apply during periods of planned routine maintenance of HCl storage tank control devices. Periods of planned routine maintenance of each HCl storage tank control device, during which the control device does not meet the emission limits specified in S1.a.i., shall not exceed 240 hours per year. (40 CFR 63.9000(d))

**b. TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)

**c. District Regulation 5.15 Regulated Substance (40 CFR 68 Subpart G)**

The owner or operator shall comply with the Risk Management Plan submitted on September 30, 2010 or the most recent submittal.

**S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1, 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

**a. HAP (Subpart 40 CFR 63 Subpart NNNN)**

i. The owner or operator must comply with the following requirements to demonstrate continuous compliance with the applicable emission limitations for each of the affected source using a caustic scrubber or water scrubber/adsorber: (40 CFR 63.9040(b))

- 1) Collect the scrubber inlet liquid or recirculating liquid flow rate, as appropriate, and monitor temperature according to §63.9025, consistent with your monitoring plan; and
- 2) Reduce the data to 1-hour and daily block averages according to the requirements in §63.9025; and
- 3) Maintain the daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate, above the operating limit; and
- 4) Maintain the daily average scrubber temperature.

ii. The owner or operator must comply with the following requirements to demonstrate continuous compliance with the applicable emission limitations for leaking equipment: (40 CFR 63.9040(b))

- 1) Verify that you continue to use a LDAR plan; and
  - 2) Report any instances where you deviated from the plan and the corrective actions taken.
- iii. The owner or operator must keep the following records to support the compliance demonstration. (40 CFR 63.9035(b))
- 1) Records of daily average scrubber inlet liquid flow rate.
  - 2) Records of the daily average scrubber temperature.
- iv. The owner or operator must keep: (40 CFR 63.9055)
- 1) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status
  - 2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
  - 3) Records of performance tests as required in §63.10(b)(2)(viii).
  - 4) Records of operating parameters values that are consistent with the monitoring plan.
  - 5) Records of the date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - 6) Copies of the current versions of the site-specific monitoring plan and the equipment LDAR plan. You also must submit copies of these plans and any revisions or updates to the District only (not for approval).
  - 7) Records of the planned routine maintenance performed on each HCl storage tank control device including the duration of each time the control device does not meet the emission limits in table 1 to this subpart, as applicable, due to planned routine maintenance. Such a record shall include the information specified in § 63.9055(b)(6)(i) and (ii).
    - a) The first time of day and date the emission limits in table 1 to this subpart, as applicable, were not met at the beginning of the planned routine maintenance, and (40 CFR 63.9040(b)(6)(i))
    - b) The first time of day and date the emission limits in table 1 to this subpart, as applicable, were met at the conclusion of

the planned routine maintenance. (40 CFR 63.9040(b)(6)(ii))

**b. TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.

**S3. Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

**a. HAP (40 CFR 63.9050)**

- i. If there were no deviations from any emission limitation that apply to you; include a statement to that effect; (40 CFR 63.9050(c)(5))
- ii. If there were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan include a statement to that effect; (40 CFR 63.9050(c)(6))
- iii. If there was a deviation from any emission limitation during the reporting period, include the information in §63.9050(d); (40 CFR 63 Subpart NNNNNN, Table 6, Item 3)
- iv. If there were periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan include the information in §63.9050(d); (40 CFR 63 Subpart NNNNNN, Table 6, Item 4)
- v. For each startup, shutdown, or malfunction (SSM) during the reporting period that is not consistent with your SSM plan, you must submit an immediate startup, shutdown and malfunction report. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report according to §63.9050(f)(1) and (2); (40 CFR 63.9050(f))
- vi. Verification that you continue to use the equipment LDAR plan and information that explains any periods when the procedures in the plan were not followed and the corrective actions were not taken; and (40 CFR 63.9050(c)(7))
- vii. A description of the planned routine maintenance that was performed for each HCl storage tank control device during the reporting period. This

description shall include the type of maintenance performed and the total number of hours during the reporting period that the HCl storage tank control device did not meet the emission limits in S1.a.i.2), due to planned routine maintenance. (40 CFR 63.9050(c)(10)(i))

**b. TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a Negative Declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.b.ii.

**U4 Comments**

1. A request was made to EPA to monitor temperature as an alternative monitoring method in lieu of pH on July 13 and October 5, 2005. On April 6, 2006 EPA approved the monitoring of the alternative operating limit parameters by monitoring temperature to meet the requirements in 40 CFR 63.9025(b) and 40 CFR 63.8(f).

**Emission Unit U5:** Gasoline Dispensing**U5 Applicable Regulations**

<b>FEDERALLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
6.40	Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery)	1.3
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	1, 2, 3.1, 3.3, 3.4, 3.6, 3.7, 3.8 and 5

<b>DISTRICT ONLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	1 and 2
5.01	General Provisions	1 and 2
5.14	Hazardous Air Pollutants and Source Categories	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

<b>U5 Equipment</b>				
<b>Emission Point</b>	<b>Description</b>	<b>Applicable Regulation</b>	<b>Control ID</b>	<b>Stack ID</b>
5000	Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	6.40	N/A	S-13
		7.15		

**U5 Control Device:** There are no control devices associated with Emission Unit U5.

**U5 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****a. VOC (Regulation 7.15, section 3 and Regulation 6.40, section 2.2.1)**

- i. The owner or operator shall install, maintain and operate the storage tank with a submerged fill pipe, vent line restrictions, a vapor balance system, and vapor tight connections on the liquid fill and vapor return hoses.
- ii. The owner or operator shall not allow delivery of fuel to the storage tanks until the vapor balance system is properly connected.
- iii. The owner or operator shall not allow delivery of gasoline to a service station without connecting the vapor return hose between the tank of the truck and the storage tank receiving the product.
- iv. The owner or operator shall maintain all above ground tanks with dry break
- v. The owner or operator shall operate and maintain equipment with no defects and all fill tubes shall be equipped with vapor-tight covers including gaskets; all hoses, fittings and couplings shall be in vapor-tight condition; and all dry breaks shall have vapor tight seals and shall be equipped with vapor tight covers or dust covers.
- vi. The owner or operator shall not exceed 10,000 gallons of throughput per month, in order to be exempted from Regulation 6.40, except for the recordkeeping and reporting requirements. (Regulation 6.40, section 2.2.1)

**b. TAC**

The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21) (See Comment 1)

**S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

**a. VOC**

The owner or operator shall keep a record of the amount of throughput of gasoline per month to determine compliance with Specific Condition S1.a.vi.



**b. TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.

**S3. Reporting (Regulation 2.16, section 4.1.9.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

**a. VOC**

The owner or operator shall submit the amount of throughput of gasoline used each month to the District by April 15 of each year, demonstrating that it met those conditions during the previous calendar year.

**b. TAC**

- i. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a Negative Declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- ii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iii. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.b.ii.

**U5 Comments**

1. The emissions from a motor vehicle fueling or refueling process and process equipment for gasoline and other liquid fuels are de minimis under STAR. (Regulation 5.21, section 2.6)

**Emission Unit U6: VF Process****U6 Applicable Regulations**

<b>FEDERALLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.15	Chemical Accident Prevention Provisions	1
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A through H
40 CFR 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	§63.2430, 2435, 2440, 2450, 2525 and 2465

<b>DISTRICT ONLY ENFORCEABLE REGULATIONS</b>		
<b>Regulation</b>	<b>Title</b>	<b>Applicable Sections</b>
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	1 and 2
5.01	General Provisions	1 and 2
5.14	Hazardous Air Pollutants and Source Categories	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

<b>U6 Equipment</b>				
<b>6000 Emission Points</b>				
<b>ID</b>	<b>Description</b>	<b>Applicable Regulation(s)</b>	<b>Control Device</b>	<b>Stack ID</b>
AB-400	Adsorbers 1962	5.21 40 CFR 63 Subpart FFFF (See Comment 3)	Scrubber (SB-403)	S-14
AB-401	Adsorbers 1962	5.21 40 CFR 63 Subpart FFFF (See Comment 3)	Scrubber (SB-403)	S-14
CL-405	Distillation Column with Condenser (C-405) and Reboiler (BR-405) 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14

U6 Equipment				
6000 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
CL-406	Distillation Column with Condenser (C-406) and Reboiler (BR-406) 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
CL-500	Distillation Column with Condenser (C-500) and Reboiler (BR-500) 2010/2003/2003	5.21 (See Comment 3)	Scrubber (SB-403)	S-14
CL-503	Distillation Column with Condenser (C-302) and Tar Concentrator (TR-302) 2011/2003	5.21 (See Comment 3)	Scrubber (SB-403)	S-14
CO-410	Cooler 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
CO-411	Cooler 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
F-416	Filter 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
F-419	Filter 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
H-405N	Heat Exchanger 2008	1.05 5.15 5.21 7.25 (See Comment 6)	Scrubber (SB-403)	S-14
H-405S	Heat Exchanger 2008	1.05 5.15 5.21 7.25 (See Comment 6)	Scrubber (SB-403)	S-14
H-406	Heat Exchanger 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14

U6 Equipment				
6000 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
RE-301	Tank 1993	5.21 40 CFR 63 Subpart FFFF (See Comment 3)	Scrubber (SB-403)	S-14
RE-402	Reactor 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
S-402	Separator 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
T-403	Tank 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
TR-303	Receiver 2009	NA	NA	NA
TR-304	Receiver 2009	NA	NA	NA
TS-401	Tank 1961	5.21 40 CFR 63 Subpart FFFF (See Comment 3)	Scrubber (SB-403)	S-14
V-301	Vent Reactor with Condenser (C-303) 1994/2006	5.21 (See Comment 3)	Scrubber (SB-403)	S-14
V-402	Vaporizer 2008	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14
8275CP	Compressor 2009	1.05 5.15 5.21 7.25	Scrubber (SB-403)	S-14

6001 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
CL-407	Distillation Column with Condenser (C-407) and Reboiler (BR-407) 2009	1.05 5.15 7.25 40 CFR 63 Subpart FFFF	NA	NA
CO-413 a & b	Cooler 2009	1.05 5.15 5.21 7.25 40 CFR 63 Subpart FFFF	NA	NA
F-409	Filter 2009	1.05 5.15 7.25 40 CFR 63 Subpart FFFF	NA	NA
F-410	Filter 2009	1.05 5.15 7.25 40 CFR 63 Subpart FFFF	NA	NA
TR-402	Tank 1964	1.05 5.15 5.21 6.24 40 CFR 63 Subpart FFFF	NA	NA
TR-403	Tank 1964	1.05 5.15 5.21 6.24 40 CFR 63 Subpart FFFF	NA	NA
TR-404	Tank 1964	1.05 5.15 5.21 6.24 40 CFR 63 Subpart FFFF	NA	NA
8850CP	Compressor 2003	1.05 5.15 5.21 7.25 40 CFR 63 Subpart FFFF	NA	NA
8880CP	Compressor 2009	1.05 5.15 5.21 7.25 40 CFR 63 Subpart FFFF	NA	NA

<b>6002 Emission Point</b>				
<b>ID</b>	<b>Description</b>	<b>Applicable Regulation(s)</b>	<b>Control Device</b>	<b>Stack ID</b>
C-408	Condenser 2009	40 CFR 63 Subpart FFFF	NA	NA

<b>6003 Emission Points</b>				
<b>ID</b>	<b>Description</b>	<b>Applicable Regulation(s)</b>	<b>Control Device</b>	<b>Stack ID</b>
NA	Pumps, connections, valves	40 CFR 63 Subpart FFFF	NA	NA
NA	Pumps, connections, gas valves, liquid valves	40 CFR 63 Subpart FFFF	NA	NA

<b>6005 Emission Points</b>				
<b>ID</b>	<b>Description</b>	<b>Applicable Regulation(s)</b>	<b>Control Device</b>	<b>Stack ID</b>
HF-6005	Unloading 1980	40 CFR 63 Subpart FFFF	CD-202	S-16

<b>U6 Control Devices:</b>			
<b>ID</b>	<b>Description</b>	<b>Performance Indicator</b>	<b>Stack ID</b>
SB-403	Wet Scrubber	Pressure Drop	S-14
CD-202	Wet Scrubber	N/A	S-16

**U6 Specific Conditions****S1. Standards (Regulation 2.16, section 4.1.1)****a. VOC**

- i. For Emission Points (S-402, V-402, H-406, H-405N, H-405S, RE-402, F-416, CO-410, F-419, 8275CP, CO-411, CL-405, T-403, CL-406, CL-407), the owner or operator shall limit the combined VOC emissions to 1.38 tons or less per 12 consecutive month period, based on the BACT analysis dated February 2, 2009. (Regulation 7.25, section 3.1) (See Comment 1)
- ii. The For Emission Points (TR-402, TR-403, TR-404), the owner or operator shall not discharge into the atmosphere more than 3,000 pounds of organic materials in any one day, nor more than 450 pounds in any one hour, from any existing affected facility in which any Class III solvent or any material containing such solvent is employed or applied unless the discharge has been reduced by at least 85% by weight. (Regulation 6.24, section 3.3) (See Comment 2)

**b. HAP (MON)**

- i. The owner or operator shall reduce the collective hydrogen halide and halogen HAP emissions by 99 percent by weight or to an outlet concentration of 20 ppm<sub>v</sub> by venting through one or more closed-vent systems to any combination of control devices or reduce the halogen atom mass emission rate from the sum of all batch process vents and each individual continuous process vent to 0.45 kg/hr (1 lb/hr) by venting through one or more closed-vent systems to a halogen reduction device. (40 CFR 63.2465(a))
- ii. The owner or operator shall operate Scrubber (SB-403) at all times when emissions are vented to it. (40 CFR 63.994(a)(2) as referenced by 40 CFR 63.2465(c))
- iii. The owner or operator shall operate the Scrubber's (SB-403) scrubbing liquor flow at a minimum of 100 gallons per minute at a pH range of 1.7 to 14 during normal operation or a pH range of 1.4 to 14 during emergency situations.

**c. TAC**

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be de minimis. (Regulations 5.00 and 5.21)
- ii. For Emission Points vented to Scrubber (SB-403), (Regulation 5.21, section 4.7)

- 1) The owner or operator shall operate Scrubber (SB-403) at all times that any of the process equipment is in operation
- 2) Scrubber (SB-403) shall have a minimum control efficiency of 91.4%.
- 3) The Scrubber flow rate shall equal or exceed the minimum manufacturer's specification of 100 gallons per minute.

d. **District Regulation 5.15 Regulated Substance (40 CFR 68 Subpart G)**

The owner or operator shall comply with the Risk Management Plan submitted on September 30, 2010 or the most recent submittal.

S2. **Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1, 4.1.9.2)**

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC (Regulation 1.05, section 4)**

The owner or operator shall keep a record of the following:

- 1) Each Reactor (RE-402) Fluorination;
- 2) Each Vent Reactor (V-301) Purge;
- 3) Each maintenance evacuation of the Acidic Eductor Vent (maintenance) (S-402; V-402; H-406; H-405N & H-405S; CO-410, F-419, 8275CP, CO-411; CL-405, C-405, BR-405; T-403; CL-406, C-406, BR-406);
- 4) Each Column (CL-407) Purge.

b. **HAP (MON)**

The owner or operator may request an alternative monitoring requirement to those listed in this section from EPA Region IV. Until EPA has approved the request, the owner or operator shall comply with the following monitoring requirements from 40 CFR 63.994(c) as referenced by 40 CFR 63.2450(e)(3):

- i. A pH monitoring device capable of providing a continuous record shall be installed to monitor the pH of the scrubber effluent. (40 CFR 63.994(c)(1)(i) as referenced by 40 CFR 63.2450(e)(3))
- ii. As an alternative to continuously measuring and recording pH as specified in §§63.994(c)(1)(i), you may elect to continuously monitor and record the caustic strength of the effluent. (40 CFR 63.2450(k)(3))
- iii. A flow meter capable of providing a continuous record shall be located at the scrubber influent for liquid flow. (40 CFR 63.994(c)(1)(ii) as referenced by 40 CFR 63.2450(e)(3))



- iv. Gas stream flow shall be determined using one of the following procedures (40 CFR 63.994(c)(1)(ii) as referenced by 40 CFR 63.2450(e)(3)):
  - 1) The owner or operator may determine gas stream flow using the design blower capacity, with appropriate adjustments for pressure drop. (40 CFR 63.994(c)(1)(ii)(A) as referenced by 40 CFR 63.2450(e)(3))
  - 2) The owner or operator may measure the gas stream flow at the scrubber inlet. (40 CFR 63.994(c)(1)(ii)(B) as referenced by 40 CFR 63.2450(e)(3))
  - 3) The owner or operator may prepare and implement a gas stream flow determination plan that documents an appropriate method that will be used to determine the gas stream flow. The plan shall require determination of gas stream flow by a method that will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than start-ups, shutdowns, or malfunctions. The plan shall include a description of the methodology to be followed and an explanation of how the selected methodology will reliably determine the gas stream flow, and a description of the records that will be maintained to document the determination of gas stream flow. The owner or operator shall maintain the plan as specified in a referencing subpart. (40 CFR 63.994(c)(1)(ii)(D) as referenced by 40 CFR 63.2450(e)(3))
- v. Records of the results of each CPMS (Continuous Parameter Monitoring System) calibration check and the maintenance performed, as specified in §63.2450(k)(1), which cites §63.998(c)(1)(ii)(A). (40 CFR 63.2525(g))
  - 1) The date and time of completion of calibration and preventive maintenance of the CPMS. (§63.998(c)(1)(ii)(A) as referenced by 40 CFR 63.2450(k)(1))
  - 2) The “as found” and “as left” CPMS readings, whenever an adjustment is made that affects the CPMS reading and a “no adjustment” statement otherwise. (§63.998(c)(1)(ii)(B) as referenced by 40 CFR 63.2450(k)(1))
  - 3) The start time and duration or start and stop times of any periods when the CPMS is inoperative. (§63.998(c)(1)(ii)(C) as referenced by 40 CFR 63.2450(k)(1))
  - 4) Records of the occurrence and duration of each start-up, shutdown, and malfunction of CPMS used to comply with this subpart during which excess emissions occur. (§63.998(c)(1)(ii)(D) as referenced by 40 CFR 63.2450(k)(1))

- 5) For each start-up, shutdown, and malfunction during which excess emissions as defined in a referencing subpart occur, records whether the procedures specified in the source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event. (§63.998(c)(1)(ii)(E) as referenced by 40 CFR 63.2450(k)(1))
  - 6) Records documenting each start-up, shutdown, and malfunction event. (§63.998(c)(1)(ii)(F) as referenced by 40 CFR 63.2450(k)(1))
  - 7) Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable. (§63.998(c)(1)(ii)(G) as referenced by 40 CFR 63.2450(k)(1))
  - 8) Records of the total duration of operating time. (§63.998(c)(1)(ii)(H) as referenced by 40 CFR 63.2450(k)(1))
- vi. Records of each operating scenario specified as follows: (40 CFR 63.2525(b)(1)(7))
- 1) A description of the process and the type of process equipment used. (§63.2525(b)(1)) (See Comment 10)
  - 2) An identification of related process vents, wastewater point of determination (POD); storage tanks; and transfer racks. (§63.2525(b)(2))
  - 3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent. (§63.2525(b)(3))
  - 4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device. (§63.2525(b)(4))
  - 5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s). (§63.2525(b)(5))
  - 6) The applicable monitoring requirements (S2.c) of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process. (§63.2525(b)(6))
  - 7) Calculations and engineering analyses required to demonstrate compliance. (§63.2525(b)(7))

- 8) For reporting purposes, a change to any of these elements not previously reported, except for S3.c.i.5), constitutes a new operating scenario. (§63.2525(b)(8))

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and/or modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases.
- iii. The owner or operator shall daily monitor and record the flow rate of water to the Scrubber (SB-403) in order to ensure that the flow rate equals or exceeds the minimum manufacturer's specification of 100 gallons per minute.
- iv. The owner or operator shall maintain a record of the date, start time, and stop time for each bypass of the control device that occurred during each month. If there are no bypasses during the month the owner or operator shall record that there were no bypasses in the month. The owner or operator shall keep a monthly and year to date total of all times that the control device was bypassed.

S3. **Reporting (Regulation 2.16, section 4.1.3)**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports.

a. **VOC**

- i. Emission Unit ID number, Stack ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Total plant-wide monthly and 12 consecutive month VOC emissions for each month from all emission points;
- iv. Identification of all periods of exceedance of the monitored parameters; and
- v. Description of any corrective action taken for each exceedance.

b. **HAP (MON)**

- i. Company name and address (§63.2520(e)(1))
- ii. Statement by a responsible official with that official's name, title, and

signature, certifying the accuracy of the content of the report. (§63.2520(e)(2))

- iii. Date of report and beginning and ending dates of the reporting period. (§63.2520(e)(3))
- iv. For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction. (§63.2520(e)(4))
- v. The compliance report must contain the information on deviations, as defined in Comment 8, according to the following: (§63.2520(e)(5))
  - 1) If there are no deviations from any emission limit, operation limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period. (§63.2520(e)(5)(i))
  - 2) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in the following: (This includes periods of SSM) (§63.2520(e)(5)(ii))
    - (a) The total operating time of the affected source during the reporting period. (§63.2520(e)(5)(ii)(A))
    - (b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken (§63.2520(e)(5)(ii)(B)).
- vi. Include each new operating scenario which has been operating since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treat device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario. (§63.2520(e)(7))
- vii. Notification of process change. (§63.2520(e)(10))
  - 1) Except as specified in S4.c.vii.2), whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance

report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (a) through (c) of this section. (§63.2520(e)(10)(i))

- (a) A description of the process change.  
(§63.2520(e)(10)(i)(A))
  - (b) Revisions to any of the information reported in the original notification of compliance status report.  
(§63.2520(e)(10)(i)(B))
  - (c) Information required by the notification of compliance status report for changes involving the addition of processes or equipment at the affected source.  
(§63.2520(e)(10)(i)(C))
- 2) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (a), or (b) of this section. (§63.2520(e)(10)(ii))
- (a) Any change to the information contained in the precompliance report. (§63.2520(e)(10)(ii)(A))
  - (b) A change in the status of a control device from small to large. (§63.2520(e)(10)(ii)(B))

**c. TAC**

- i. For Scrubber (SB-403),
  - 1) Emission unit ID number and emission point ID number
  - 2) The beginning and ending date of the reporting period
  - 3) Identification of all periods where the flow rate of water is below the limit.
  - 4) The monthly bypass hours for each month and the year to date total
  - 5) Description of any corrective action taken for each exceedance
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or

meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze.  
(Regulation 5.21 sections 4.22 – 4.24)

- iv. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.c.ii.

### **U6 Comments**

#### **VOC**

1. The BACT analysis, required by Regulation 7.25, dated February 2, 2009 demonstrated that there were no controls economically feasible for the potential combined VOC emissions of 1.38 tons per year.
2. The source cannot exceed the pound per day or pound per hour limits in Regulation 6.24 for Class III solvents.
3. This emission point from Unit U6000 Emission Points' table does not contain VOCs.

#### **TAC**

4. The potential uncontrolled Hydrogen Fluoride (Category 2 TAC) emissions are less than the de minimis rate of 7.6 pounds per hour. The potential controlled Hydrogen Fluoride (Category 2 TAC) emissions are less than the de minimis rate of 6,720 pounds per year. Therefore, in order to be environmentally acceptable the control device must be operated at all times except for 237 hour per year.

#### **HAP (40 CFR 63 Subpart FFFF) (MON)**

5. There are no process streams in the VF Miscellaneous organic Chemical manufacturing Process Unit (MCPU) that contain organic HAPs. Therefore, the Miscellaneous Organic NESHAP (MON) leak detection and repair (LDAR) monitoring requirements do not apply to the Vinyl Fluoride process.
6. The heat exchange systems used in the VF MCPU are all closed loop systems that use steam, water, or non-HAP brines (propylene glycol and salt solutions). Since there are no organic HAPs in the process fluids or the heat exchange systems, the heat exchange monitoring requirements do not apply.
7. Hydrogen fluoride (HF) is the only HAP contained in wastewater streams from the VF MCPU. It is an inorganic HAP and not listed in the applicable tables, therefore the wastewater streams do not meet the definition of MON wastewater and the requirements are not applicable.
8. Deviation means any instance in which an affected source:

- a. Fails to meet any requirement or obligation established by this subpart (40 CFR63 FFFF) including, but not limited to, any emission limit, operating limit, or work practice standard; or
  - b. Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and this is included in the operating permit for any affected source required to obtain such a permit; or
  - c. Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.
9. The MON record keeping description of the process and the type of process equipment used was included in the construction application and subsequent submittals.

**Miscellaneous**

10. The VOC increase from Phase 1, 2, and 3 of this project was 9.31 tpy. The VOC increase from Phase 4 of this project is 15.61 tpy. For phases one through four, the potential VOC increase is 24.92 tpy, which is below the 40 ton/yr significant level for PSD/Non-Attainment NSR.
11. Hydrogen Fluoride (HF) is a HAP and TAC, but not a VOC. Vinyl Fluoride (VF) and Acetylene are VOCs, but not HAPs or TACs.

### Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

### Off-Permit Documents

<b><u>Document</u></b>	<b><u>Date</u></b>
1.18 Rule Effectiveness Plan	20 September 1994
Risk Management Plan	16 June 1999
Risk Management Plan	12 February 2004
Risk Management Plan	24 April 2009

### Alternative Operating Scenario

The owner or operator requested no alternative operating scenario in its Title V application.

### Insignificant Activities

<b>Equipment</b>	<b>Quantity</b>	<b>Basis for Exemption</b>
Internal Combustion Engines	25	Regulation 2.02, 2.2
Brazing, Soldering or Welding Equipment	5	Regulation 2.02, 2.3.4
Woodworking, Not Including Conveying, Hogging or Burning of Sawdust	8	Regulation 2.02, 2.3.5
Emergency Relief Vents and Ventilating Systems (Not Otherwise Regulated)	324	Regulation 2.02, 2.3.10
Laboratory Ventilating	1	Regulation 2.02, 2.3.11
Laundry	1	Regulation 2.02, 2.3.3
Portable Diesel or Gasoline Storage Tanks	1	Regulation 2.02, 2.3.23
Above-Ground Fuel Oil Storage Tanks	7	Regulation 2.02, 2.3.9.2
On-Site Quality Control Laboratories	2	Regulation 2.02, 2.3.11
Laboratory Ventilating and Exhausting Systems for Non-Radioactive Materials	3	Regulation 2.02, 2.3.11
Salt Furnace and Associated Natural Gas Burner (5 MM BTU/Hr)	1	Regulation 2.02, 2.1.1 (See Note e)
Blast Cleaning (Abrasives in Water)	2	Regulation 2.02, 2.3.13
Soil or Groundwater Contamination Remediation Project	1	Regulation 2.02, 2.3.20
Dust or Particulate Collectors that are Located Indoors, Vent Directly Indoors Into the Work Space	5	Regulation 2.02, 2.3.21
Glass Bead Blaster	1	Regulation 2.02, 2.3.20
Portable Diesel/Gasoline Storage Tanks	5	Regulation 2.02, 2.3.23
VOC Storage Vessels with Maximum Capacity of 250 Gals or Less	9	Regulation 2.02, 2.3.24
Pressurized VOC Storage Vessels	5	Regulation 2.02, 2.3.26



<b>Equipment</b>	<b>Quantity</b>	<b>Basis for Exemption</b>
Research and Development Activities	3	Regulation 2.02, 2.3.27
Two (2) Non-halogenated Cold Solvent Parts Cleaners	2	Regulation 2.02, 2.3.22 (See Note f)

- a. Insignificant Activities are only those activities or processes falling into the general categories defined in District Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- b. Activities identified in District Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source.
- c. For all insignificant activities that emit regulated air pollutants for which the company has accepted a plant-wide limit, the company shall maintain sufficient records to calculate the emissions and report those emissions in the quarterly compliance reports and the annual emissions inventory report.
- d. The Insignificant Activities table is correct as of the date the permit was proposed for review by the USEPA, Region 4. The company shall submit an updated list of insignificant activities annually with the Title V compliance certification pursuant to District Regulation 2.16, section 4.3.5.3.6.
- e. This equipment has an applicable regulation, but meets the definition of an insignificant activity in Regulation 2.16, section 2.1.1. Regulation 7.08 applies, with standards in sections 4.1.
- f. This equipment has an applicable regulation, but meets the definition of an insignificant activity in Regulation 2.16, section 1.23.1.2. Regulation 6.18 applies, with standards in sections 4.1.1 through 4.1.4, 4.1.6, 4.1.8; 4.2.1 through 4.2.7 and 4.3.2. Record keeping requirements are in sections 4.4.2 and 4.4.3.
- g. In lieu of recording annual throughputs for each Insignificant Activity, the owner or operator may elect to report the Potential To Emit quantity listed in the Insignificant Activities table as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are minor.

**NO<sub>x</sub> RACT Plan**

1. The oxides of nitrogen (NO<sub>x</sub>, expressed as NO<sub>2</sub>) emission from each Boilers shall not exceed 0.20 pounds per million Btu of heat input, based upon a 30-day rolling average. This limit applies at all times, including periods of startup, shutdown, or malfunction.
2. E.I. du Pont de Nemours & Company (DuPont) shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), and record the output of the system, for measuring NO<sub>x</sub> emissions from each boiler. The following requirements apply to each CEMS:
  - A. A CEMS shall be operated and data recorded during all periods of operation of each boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments,
  - B. The 1-hour average NO<sub>x</sub> emission rates measured by a CEMS shall be expressed in pounds per million Btu heat input and shall be used to calculate the average emission rates under NO<sub>x</sub> RACT Plan Element (Element) No. 1,
  - C. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(b). At least 2 data points shall be used to calculate each 1-hour average,
  - D. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of a CEMS,
  - E. The span value for NO<sub>x</sub> is 500, and
  - F. When NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7a, or other reference methods approved by the District to provide emission data for a minimum of 75% of the operating hours in each boiler operating day, in at least 22 out of 30 successive boiler operating days.
3. By January 1, 2000, DuPont shall submit to the District the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR Part 60 Appendix B.
4. DuPont shall maintain the records listed in 40 CFR §60.49b (g) with the following clarifications:
  - A. The NO<sub>x</sub> emission rates shall be expressed in pounds per million Btu heat input measured, and
  - B. The applicable NO<sub>x</sub> emission limit is contained in Element No. 1. Each record shall be maintained for a minimum of 5 years and made available to the District upon request.
5. DuPont shall submit to the District the following reports:

- A. Excess emission reports for any excess emissions that occurred during the reporting period. "Excess emissions" means any calculated 30-day rolling average NO<sub>x</sub> emission rated, as determined under Element No. 2, that exceeds the emission limit contained in Element No. 1, and
  - B. Reports containing the information required to be recorded by Element No. 4
6. The reports required to be submitted by Element No. 5 shall reflect the preceding semi-annual period. Semi-annual periods shall run from January 1 to June 30 and July 1 to December 31. If no deviation occurred during the semi-annual period, the report shall contain a negative declaration. Each report shall be submitted within 60 days following the end of the semi-annual period.
7. In lieu of the requirements in this NO<sub>x</sub> RACT Plan, DuPont may comply with alternative requirements regarding emission limitations, equipment operation, test methods, monitoring, record keeping, or reporting, provided the following conditions are met:
- A. The alternative requirements are established and incorporated into an operating permit pursuant to a Title V Operating Permit issuance, renewal, or significant permit revision process as established in Regulation 2.16.
  - B. The alternative requirements are consistent with the streamlining procedures and guidelines set forth in section II.A. of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, March 5, 1996, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. The overall effect of compliance with alternative requirements shall consider the effect on an intrinsic basis, such as pounds per million Btu,
  - C. The EPA has not objected to the issuance, renewal, or revision of the Title V Operating Permit, and either
  - D. If the public comment period preceded the EPA review period, then the District had transmitted any public comments concerning the alternative requirements to the EPA with the proposed permit, or
  - E. If the EPA and public comment periods ran concurrently, then the District had transmitted any public comments concerning the alternative requirements to EPA no later than 5 working days after the end of the public comment period.
8. The District's determination of approval of any alternative requirements is not binding on EPA. Noncompliance with any alternative requirement established pursuant to the Title V Operating Permit process constitutes a violation of the NO<sub>x</sub> RACT Plan.